

STAT

Approved For Release 2003/05/15 : CIA-RDP78-04007A001100030008-9

Approved For Release 2003/05/15 : CIA-RDP78-04007A001100030008-9

INTERNAL TELEPHONE SYSTEM

- #1 BPS Memorandum to OS 30 July 1956  
Requests OS to make position known relative to a secure telephone system.
- #2 Building Security Branch Memorandum to DD/PPS 6 September 1956  
Four methods of telephone installation which might be used in a secure system are discussed. From a security standpoint alone, tubing in concrete is the preferred method.
- #3 DD/PPS Covering Memorandum to OS 30 November 1956  
Covering memorandum for a draft (not sent) setting forth OS requirements for an internal telephone system based on a Staff Study dated 16 November 1956
- #4 BPS Memorandum for the Record 3 January 1957  
An account of a meeting with BPS personnel and C&P Telephone Company officials in which is discussed the Telephone Company's position toward an Agency supervised system.
- #5 OS Memorandum to BPS 12 February 1957  
The general (as opposed to specific) security requirements for an internal telephone system are:
1. The system must be entirely within the exclusive control of the Agency.
  2. All parts of it must be available to technical inspection.
  3. The system should be owned and maintained by the Agency.
  4. If necessary to lease from a commercial organization, then the Agency must have unlimited control of and access to the system for whatever purpose desirable.
  5. All employees of such commercial firm who may have access to the system must have been cleared by the Agency.

337

6. The system must be mechanically, physically, and electrically separated from all other communications systems.
7. The system must have automatic switching equipment.
8. Records of terminal allocations must be handled as classified material and kept within the exclusive custody of the Agency.
9. Preliminary and tentative requirements for minimum physical security are also included.

STATINTL

#6

[REDACTED] File Notes

14 March 1957

These notes cover a meeting with EPS personnel in regard to an internal telephone system. Mentioned are various figures on estimated number of lines and hand sets, cost there-of and the method of arriving at the figure. Some discussion is also made re the validity of such estimates.

STATINTL

#7

Survey Branch Memorandum to DD/S

15 March 1957

(Attached - [REDACTED] Memorandum for the Record, dated 21 February 1957)

Status report on developments to date concerning the internal telephone system. OS position is that of an Agency owned and controlled system is preferable. The NBS has taken the initiative in research on systems other than that which could be provided by the C&P Telephone Company on a rental basis. Paragraph 12 states that the EPS will provide for cables to be laid for a dual system taking normal expansion into consideration. In addition to outside service comparable

STAT

STATINTL

338

STATINTL

#8

Memorandum

3 May 1957

An account of a meeting with OC personnel in which was discussed security requirements for an internal telephone system. OC concurred in OS recommendations (see item #5). The discussion then covered the matter of the OC recommendation of exposed wires and securing instruments when not in use. Because of the unsightly appearance of exposed wires; the additional wear on the hand sets; the room in safes required; and the debatable added security obtained in locking up hand sets when not in use, OS and EPS does not concur with OC's recommendations. OS recommended that installation be made by means of concealed ducts in the floor.

#9

EPS Letter to C&P Telephone Company

8 May 1957

States that the Agency must have exclusive control of the internal telephone system; that the system not be connected in any way with any other telephone system; the Agency can inspect or modify the system at will and without the knowledge of or participation in by the company; all telephone company employees who have access to the system must be Agency cleared; and terminal allocation records will be in Agency custody.

#10

OC Letter to OS

17 May 1957

(Attached OS Letter to EPS for OC concurrence)

OC maintains that it cannot properly concur or not concur in the attached letter which gives OS approval of installing wiring for an internal telephone system in floor ducts.

#11

C&P Telephone Company Letter to EPS—

2 July 1957

A reply to EPS letter (item #9) accepting the mentioned security considerations for an internal telephone system.

#12

BPS Memorandum for the Record

16 August 1957

A brief account of a meeting in which it was decided by the DD/S that a leased internal telephone system from the C&P Telephone Company would be preferable to equipment purchased by the Agency. It was also decided that the wiring would be installed in floor ducts rather than exposed as recommended by OC.

339

*Office Memorandum* : UNITED STATES GOVERNMENT

TO : Director of Security

DATE: 30 November 1956

FROM : Deputy Director of Security (PPS), OS

SUBJECT: Secure Internal Telephone System

1. The attached draft sets forth our proposed position and specifications covering the installation of the Secure Internal Telephone System for the new Headquarters building.

2. It is being forwarded in draft form in the event you are called by other offices to whom the draft has been sent for coordination.

3. Please return if it meets your informal okay.



25X1A9A

Enclosures:

1. Draft, as stated above.
2. Working papers w/encls thereto.

SECRET

345

TO : Chief, Building Planning Staff, OL

DATE:

FROM : Director of Security

SUBJECT: New Headquarters Building  
Secure Internal Telephone System

1. The Office of Security will approve the installation of an internal telephone system in the new Headquarters building, over which classified material through SECRET may be transmitted, providing that the system complies with the following security criteria:

a. The system must be entirely and exclusively within Agency control. It must be physically, mechanically, and electrically separated from any other communications system of any kind; its wire circuits must be in cable sheaths which contain no wires used for any other purpose; its cables must be in conduits which contain no other cables, wires, or other items used for any other purpose; its source of power must be securely separated from that used for any other purpose.

b. The system must be physically entirely within the guarded and controlled area of the building. No telephones connected to it should be installed in, and no wires or other parts of it should pass through, the areas of the building where uncleared persons are permitted access, such as the contemplated ground floor public corridors, uncleared pool, uncleared training area, custodial force rooms, cafeterias, or detention rooms. No connections to it should be installed in any snack bar or other non-Agency activity which may be permitted to be located within the guarded area. No connections to it should be installed in any reception area to which outside persons come for any purpose; necessary calls from such reception areas must be by the standard (or ordinary, or other) telephone system to points where, if necessary, the messages can be relayed to other points.

346

-2-

c. The system must be protected from any possibility of tampering by unauthorized persons. Terminal boxes, openings in the conduits, and any similarly sensitive points in the system must be protected by adequately constructed metal coverings equipped either with locks or with a positive alarm system.

d. The main distribution frame and switching equipment must be located within the guarded area in a room constructed as a Secure Area and established as a Restricted Area with Agency guards controlling access to specially identified authorized personnel.

e. The system should be the automatic dial type, with no manual operators.

f. The maintenance, servicing, and repair work on the system should be either by fully cleared Agency personnel, or by such necessary outside workmen who have been security cleared on the same basis as Agency personnel. Should emergency service or repair work be necessary by other than fully cleared personnel, such personnel should be under continuous surveillance by Agency personnel, who are familiar with the operation of the system.

g. The system should be equipped with devices which give audible notice to the users whenever authorized repair workers, or any other persons, are working on, or have cut into a line for any purpose.

h. The telephone instruments for users of the system should be clearly distinguishable from other telephone instruments by means of different color and design, and should be located apart from and outside the normal hearing range of the location of other telephone instruments.

i. The system must be so installed to allow technical security inspections of all parts at any time.

j. Regulatory procedures for the use of the telephones of the system should include a means of satisfactory identification of the users to each other, and also should include instructions that, although

347

-3-

conversations up to and including SECRET are permitted, no names, information, or data greater than ordinary sensitivity will be mentioned in such conversations, and that it will not be used for any material or data for which any type of clearance other than, or in addition to, the regular Agency clearance is necessary.

2. It is understood that equipment is available for acquisition, and that the planned design of the building will permit an arrangement, which will meet security requirements. If any of the security factors mentioned herein affect the possible use or adoption of the system, it is requested that these features be directed to the Office of Security for resolution.

Sheffield Edwards

348

SECRET



By: [REDACTED]

16 November 1956

STATINTL

STAFF STUDY

TELEPHONES, INTERNAL SECURE SYSTEM  
FOR NEW HEADQUARTERS BUILDING

PROBLEM

An internal non-cryptographic telephone system for the new Headquarters Building that will meet the requirements of EO 10501 and the security standards of the Agency for transmission of classified information.

ASSUMPTION

Access to specified areas of the new building will be rigidly controlled and restricted to fully cleared personnel with all visitors physically identified and constantly under escort.

FACTS BEARING ON THE PROBLEM

EO 10501 provides that intra-Agency transmission of classified material shall be governed by regulations issued by the department or Agency insuring a degree of security equivalent to that outlined for inter agency or department transmission. With respect to this outside transmission, the Executive Order provides that Top Secret material shall be transmitted preferably by direct contact of officials, or alternatively by specifically designated personnel, by State Department diplomatic pouch, by messenger-courier system especially created for the purpose or by electric means in encrypted form.

With reference to transmission of Secret material, the Executive Order provides that this may be transmitted within the United States by registered mail or protected commercial express.

An independent internal telephone system is available through outright purchase of equipment or possibly through leasing.

[REDACTED] the Communications Assistant, Building Planning Staff, advises that a survey recently completed indicates that the number of instruments necessary for a dual system is approximately [REDACTED] instruments; 40 per cent in the conventional system, 60 per cent in the internal system.

349

#### DISCUSSION

In the course of this survey, it was the opinion of all interviewed that an internal telephone system does afford a measure of protection to conversations not available under the conventional telephone system. There was a great divergence of opinion, however, on whether this additional protection is enough to warrant transmission of classified information, the extent of additional safety features necessary to make an internal telephone system adequately secure for transmission of classified information, and the extent of disclosure that could be justified.

It was the consensus that a safe telephone system must meet the following requirements:

- a. Be electrically, mechanically, and physically separated from any other communications system of any kind.
- b. Have no circuits in the same cable sheath with any other communications system.
- c. Have terminal boxes and other sensitive points adequately protected.
- d. Have main distribution frame and switching equipment located in a secure area and completely isolated from any other wiring terminal points.
- e. Have no instruments outside guarded areas or accessible to uncleared personnel.
- f. Be serviced only by fully cleared personnel.
- g. Receive frequent inspection and periodic spot checks by technical personnel.
- h. Have the instruments distinctively colored for ready identification.

The type of system, installation, and operation to justify approval for transmission of classified information is an extremely controversial subject.

Visible lines and cables have the advantage of ease of visual inspection, but the disadvantage of being easily identified, located, and tapped. Concealed lines with cables and conduits are difficult to inspect; however, the disadvantage is compensated for by the difficulty of uncleared personnel locating cables so installed and in tampering with them in areas guarded and patrolled. It would be very difficult to tamper with such lines without leaving evidence.

STATINTL

[ ] Security/AEC, stated that at one time consideration was given to a very limited safe telephone system in the new building for communication between the directors, but had vigorously and successfully been opposed by Security as not being desirable. He added that no detailed study of such a system had been made.

STATINTL

[ ] Commo Security/NSA, stated that his conclusion that NSA had a safe telephone system was based primarily on the fact that it was an independent system accessible only to cleared personnel, was operated in a guarded area, and that there was a rigid control of visitors to areas where the lines and phones are installed. He indicated the isolation of the system from other communication systems and control of personnel for access to and servicing the system were the prime consideration, not the type of equipment. He indicated their experience with exposed cables, which theoretically are desirable because of alleged ease of inspection, was unsatisfactory. Exposed wiring soon led to a "spider web" of wires which were impossible to monitor. He cited an incident where some radio equipment with a pair of rabbit ears was accidentally deposited in a hallway with the rabbit ears straddling the exposed line which picked up and broadcast a telephone conversation. In his opinion, the difficulty encountered in tampering with cables in conduits compensated for the frequent periodic inspection of exposed lines. NSA safe telephones have been approved only for information through Secret. Because lines connecting to the outside are to be in the minority, they are the ones to be distinctively colored to warn the employee he is not using a cleared line. [ ] stated as the Signal Corps of the Army installs and services their safe telephones, they have no personnel problem regarding the use of cleared personnel or personnel costs.

STATINTL

STATINTL

[ ] Commo, has submitted specifications for a secure telephone system (see Tab A). He recommends exposed wiring for ease of visual checks. He stated that in engineering an independent system, consideration should be given to it being compatible with the cryptographic telephone device. [ ] also advocates jacks for all telephones so the instrument can be stored in a safe when not in use. This latter recommendation is based on the fact that microphones and transmitters can easily be placed in a telephone instrument and have even been built into the instrument.

STATINTL

351

STATINTL

[redacted], submitted a prospectus (see Tab B), on a complete dial telephone system that incorporates security cable (see Exhibit A), and which is protected by an alarm system from and including instrument to main frame and switchboard. He averred that this system is practically tamper proof.

STATINTL

STATINTL

STATINTL

STATINTL

The subject of a secure telephone system and specifically the [redacted] were discussed with [redacted]. He was familiar with the [redacted] system and favorably impressed with it, but felt that its cost was not justified. He felt that probably some type of cable protection would be necessary where lines passed through unrestricted areas or through areas where access to the cables could be had without being observed, such as washrooms, closets, etc. [redacted] agreed with [redacted] of NSA that as long as the system was totally independent of any outside system, was wholly confined to guarded and controlled areas, and was frequently inspected, it mattered little what type of equipment was used. In his judgment, no system was 100 per cent tamper proof and most effective protection was the restriction of access to areas served by the installation.

STATINTL

Mr. Stanley E. Holden, Physical Security, Department of State, advised that they have approved the installation of a 50 instrument Stromberg-Carlson Dial X system with alarm cable for the offices of the various directors. However, because access to the proposed new Department of State building is not to be restricted or controlled, the system has no approval for transmission of classified information. The same type system has been installed in field installations and where access to the area is restricted, they have approved the phone transmission of classified information through Confidential.

STATINTL

The problem of a secure telephone system was coordinated with OSI through [redacted] the Security Officer, OSI, who submitted recommendations for an entirely independent system, with no outside connections, and confined exclusively to the guarded area of the new building.

STATINTL

A survey by Mr. [redacted], Building Security Branch, Physical Security Division, is attached hereto, (see Tab C), which along with other matters recommends the use of conduits in concrete or Q-floor as preferable to visual wiring because the difficulty of tapping wires in conduits more than compensates for ease of visual inspection of exposed lines.

Frank Knight, C&P Telephone Company, was interviewed and stated that he could make no commitments for the D&P Telephone Company with respect to installation and maintenance of an internal system for the Agency until the Agency was ready to set up requirements. He indicated an understanding of security factors and a desire to cooperate in the development and installation of any security safeguards. (Note: Costs of installations and maintenance would depend upon a determination of the number of instruments required.)

STATINTL

Mr. [ ] Office of Logistics, believed that the C&P Telephone Company would favorably consider installing and operating an independent telephone system to avoid jurisdictional labor disputes.

STATINTL

[ ] indicated that his company is equipped to sell and install a complete dial telephone system utilizing phone equipment manufactured by Stromberg-Carlson and incorporating a security alarm system manufactured by his company. He also indicated that his company had expressed an interest in a leasing arrangement if an acceptably contract for a sufficient period of time to amortize the equipment could legally be drawn up. He indicated that his company would be interested in installation with or without maintenance control.

STATINTL

Mr. [ ] of OSI indicated the General Telephone of Chicago is prepared to install and lease telephone equipment.

The possibility of Agency negotiating with the Signal Corps of the Army for installation and/or maintenance of an independent telephone system similar to the system used by NSA was not pursued.

STATINTL

Mr. [ ] stated that he believed the C&P Telephone Company, if selected to install and maintain an internal system, would require a proportionately higher rental on the equipment used on the internal system as it would not be producing any toll revenue. Any special safety features would also entail extra installation and maintenance charges.

STATINTL

Using a loose estimate per instrument, including installation costs, supplied by [ ] reveal that the cost alone of installing a [ ]-instrument telephone system with security alarm would be approximately \$1,200,000. Because of alarm features, the maintenance charges would be greater than on a conventional telephone system.

STAT

Dual telephone systems would necessitate additional expenses in building construction to allow for duplicate ducts, separate frame rooms, etc. Operating costs would also be higher because of additional personnel necessary to service two systems.

Gas tubing, alarm cables, alarmed equipment and instruments from a security standpoint would be highly desirable; however, in a large system, the cost of operation and installation would be extremely high. In addition, alarm systems probably would not be practical as there certainly would be frequent phone changes which would activate the alarm system and render it ineffective. Even if zoned, there probably would be large areas a good portion of the time where the alarm system would be inoperative.

It has been proposed that the secure phones use jacks in order that the instrument can be removed and locked in a safe when not in use. This suggestion apparently is predicated on the fact that a telephone instrument is vulnerable to a third wire tap and also is adaptable to concealing a microphone and transmitter. With respect to the third wire tap, this hazard is greatly diminished because the instrument will have no outside connections. Regarding the threat of compromise by use of microphone and transmitter, this is a security hazard not unique to a telephone, but a potential source of compromise in any area where classified information is discussed. From an operating standpoint the universal use of jacks on the telephone undoubtedly would not be practical. Such a system would mean that any calls to an employee while he was on leave would not be answered and would result in numerous complaints to the telephone office.

#### CONCLUSIONS

A telephone system having connection with outside lines will not meet Agency security standards or the requirements of EO 10501 for transmission of classified information.

No telephone system appears to have the degree of security equivalent to that required by EO 10501 for transmission of Top Secret information.

An internal telephone system completely independent and isolated from outside lines operating entirely in controlled areas and accessible only to cleared personnel would afford protection equivalent to that required for the transmission of Secret information as required by EO 10501.

The system should be large enough to handle the major portion of internal calls.

An internal system of a limited number of phones would result in a considerable saving; however, from a security standpoint a general system large enough to handle all internal telephone requirements has advantages.

Unless safe telephones are generally available, employees will be tempted to discuss classified information over the regular telephone system by use of "double talk" paraphrasing and, as one person commented, using "pig latin." Many phrases currently in use over our present telephone system would fool no one remotely interested in the Agency as, for example, the terms [REDACTED] A safe internal telephone system would greatly diminish the hazard of compromise through inadvertent disclosures in telephone conversations, also the mixture of unclassified information with classified information would be desirable.

STATINTL

A reduction in toll charges will result through limitation of telephones having outside connections; however, it is believed that the sum so saved will not be substantial.

There undoubtedly will be a saving in processing time and a reduction in the man hours in personal trips or preparing memorandum involving classified matters. This saving should be substantial.

The expense of an entirely alarmed telephone system would be neither justified nor practical.

#### RECOMMENDATION

It is recommended that the Office of Security approve an internal telephone system for transmission of classified information through Secret, provided the system is electrically, mechanically, and physically separated from all other communications systems; that it has no circuits in the same sheath with any other communications systems; that it has terminal boxes and other sensitive points adequately protected either through an alarm system or locks; that it has its main distribution frame and switching equipment located in a Secure and Restricted Area which is adequately guarded; that it has no telephone instruments outside guarded areas or accessible to uncleared personnel; and is serviced only by fully cleared personnel; that, even though classified as Secret or below, it will not be used to discuss the names of Agents, penetrations, highly sensitive operations, and related matters; and, further, provided that it is technically equipped to give notice to the users when workmen, repairmen, or others "cut in" on the line.

355

Chief, Building Planning Staff, OL

Director of Security

New Headquarters Building  
Secure Internal Telephone System

12 Feb. 1957  
#5

1. The detailed security requirements for an internal telephone system in the new Headquarters Building, over which information classified through SECRET may be transmitted, are still under study by OS in coordination with other technical components of the Agency. There are, however, certain general security requirements which can be set forth at this time to assist in the development of the building construction plans; and to aid in determining the scope of such a system.

2. Security requirements for the general system are:

a. The system must be entirely within the exclusive control of the Agency, and all parts of it must be subject to independent technical security inspection by the Agency. It is a security preference that the system be owned and maintained by the Agency. But if practical considerations make it necessary to have an outside organization lease and maintain the system, or any part of it, then the leasing and contract arrangements must give the Agency control of access to the system, and must permit the Agency to inspect or to modify the system, or any part of it, at any time without participation by, or the necessity for disclosure to, the lessor or contractor.

b. All employees of any lessor or contractor who may work on or have access to any part of the system, must be subject to such security clearance procedures as the Agency may require.

c. The system must be physically, mechanically, and electrically separated from any other communications system of any kind.

d. The system must be the automatic dial type, with no manual switchboard operation.

358



a. Terminal block allocation records must be kept within the exclusive custody and control of the Agency, and must be handled as classified material.

3. Physical security requirements relating to the building construction are as follows:

a. The main distribution frame and switching equipment, and all sub-frame equipment, must be located in rooms completely separate from those used for similar equipment of the normal telephone system, and from rooms used for any other purpose. Such rooms should be constructed as Secure Areas.

b. The sub-frame rooms (it being understood that two will be necessary on each floor) should be in a vertical line constituting, in effect, two Secure Areas rising from Ground Floor to Top Floor, with sleeves provided to pass the vertical run of cables from floor to floor.

c. All cables and wires of the system must be in cable sheaths which contain no wires used for any other purpose. The run of such cables from main distribution frame and switching equipment room, to the sub-frame rooms, to corridor terminal boxes, and to any terminal boxes within office rooms, should be through completely separate (from normal telephone service or other wires) conduits or ducts entirely within the controlled area of the building, and preferably in metal conduits buried in the concrete of the floor.

d. All pull-holes or other means of access to the conduits or ducts either should be provided with locked covers, or provision made for tack welding the covers in place.

e. All terminal boxes must be separate from the terminal boxes of the normal telephone system, and must be of metal and equipped with approved locking equipment.

4. The foregoing physical security requirements are not all inclusive. There still remain to be worked out the manner in which individual instruments are to be connected to the room terminal boxes, and the manner in which the wires in the office rooms, and the instruments themselves, can be made secure. It is not contemplated, however, that the wires within individual office rooms will run through any floor ducts.

5. Security matters relating to the use of the system, or to the installation of stations or extensions on the system,

359

-3-

cannot yet be stated completely. However, the following preliminary requirements can be set:

a. No telephone instruments can be installed in, nor can wires leading to them pass through, any part of the building where uncleared persons may have uncontrolled access, such as the ground floor public corridors, the uncleared pool and training area, the rooms of the custodial force, guard posts, cafeterias, snack bars, or receptionist rooms.

b. Extensions on any individual line must be limited to the extent that where they are other than within line of sight in an individual office room, they must be equipped with an exclusion key device to enable the principal user to cut off any extension in any outer or separate room. That is, a line can run into a principal's office, and be extended from there to the office of a secretary in an adjoining room, so that the secretary can answer the call for her principal; but when the principal is notified of the call, he must be able to cut off the extension into his secretary's office.

Sheffield Edwards

OS:PhySD/SB:JFMCI/frg

Distribution:

Orig. & 5 - Addressee  
1 - NB File  
1 - Reading  
1 - D/OC

CONCUR:

For Director, Office of Communications

CONFIDENTIAL

360

3 MAY 1957

MEMORANDUM FOR THE FILE

SUBJECT: New Headquarters Building  
Secure Internal Telephone System

25X1A

25X1A9A

25X1A9A

25X1A9A

1. On 3 May 1957, [ ] Acting Chief, and [ ] of the Survey Branch, discussed with [ ] Chief, Security Division, Office of Communications, the memorandum prepared for submission to the Building Planning Staff, OL, giving the security requirements for the referenced system. Under date of 12 February 1957, OS had submitted to EPS a memorandum giving the security requirements for the system, which carried it up to the office rooms; OC concurred in that memorandum. The present further memorandum is intended to set forth the security requirements for the running of lines and placing of instruments inside the office rooms.

2. OC previously had recommended that the wires be exposed, and that the instruments be treated as classified material, to be stored in safes each night. EPS has opposed the exposed wiring within rooms, as entailing wires hanging from the system to every desk; while OC suggested looping the wires around the walls as an alternative, OS agrees with EPS that both such ideas would make for unsightly appearance of offices. OS does not believe that sufficient added security is given by locking the instruments at night to justify the devotion of safe space to this purpose, or the wear and tear on the telephone equipment which would result; the disengaged connection place (such as a jack) still would be a potential danger spot.

3. Therefore, OS prepared the present memorandum, in effect permitting the installation of the wires in the rooms via separate floor ducts. This conclusion was reached after consideration of all security factors, and upon failure of anyone to come up with any better ideas. While exposed wires permit technical inspection, the many miles of wire would prevent actual inspection except at long intervals; burying the wires in secure conduits limits strictly the means of access to them, and reduces the points requiring technical inspection.

25X1A9A

4. The present memorandum was submitted to OC for concurrence. [ ] stated that OC still maintains the position it took in its previous recommendations for exposed room wiring and locked-away

GROUP 1

377

instruments. Upon discussion, he still held this position, and it was requested that he prepare a memorandum setting forth his non-concurrence and return the paper to the Survey Branch.



25X1A9A

STAT

Approved For Release 2003/05/15 : CIA-RDP78-04007A001100030008-9

Next 1 Page(s) In Document Exempt

Approved For Release 2003/05/15 : CIA-RDP78-04007A001100030008-9

8 MAY 1957

Colonel E. Goring Bliss  
Assistant Vice President  
Security Control Officer  
Chesapeake & Potomac Telephone Co.  
Washington 25, D. C.

Dear Colonel Bliss:

On several occasions during the past few months we have consulted with you and some of your people in connection with telephone matters which we must take into account in planning for our new building.

You will recall our interest in a completely isolated internal telephone system designed to meet the needs of this Agency. We have not yet been able to make a final decision as to the inclusion of such a system, and it will be some time before we have sufficient information as to the need for and the use of the facility.

In the meantime we feel that certain policy considerations of particular importance to us should be clearly defined and their acceptance by your Company indicated in the event an internal telephone system is installed by and rented from your Company. The policy considerations about which we are concerned are as follows:

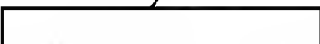
The internal telephone system must be entirely within the exclusive control of the Agency and must not be in any way connected with any other telephone communication system. The Agency must control access to the system, can inspect or modify the system or any part of it at any time without participation by or the necessity for disclosure to the Company. All employees of the Company who work on or have access to the system must be subject to Agency security clearance procedures. Terminal block allocation records must be kept within the exclusive custody and control of the Agency and handled as classified information.

383

I should like to take this opportunity to express our appreciation for the cooperation and assistance you, Mr. Knight, and other members of your staff have given us. You have helped us a great deal already, and we shall undoubtedly call upon you for advice from time to time as our planning progresses.

Sincerely,

/S/

  
Chief, Building Planning Staff

STATINTL

18-28417

#10

17 MAY 1957

Director of Security

Director of Communications

New Headquarters Building Secure  
Internal Telephone System

REFERENCE: OC 6561 dated 19 December 1956  
OC 6659 dated 1 February 1957

1. This will confirm the discussion with you and [ ] in my office on Wednesday, 15 May 1957 concerning requirements for the proposed secure internal telephone system for the new Langley building. The discussion centered around a proposed memorandum written by your staff addressed to the Building Planning Committee in which my concurrence was requested.

25X1A9A

2. I do not believe that it is proper for me to either concur or non-concur to the memorandum. My position in this is to make technical recommendations to you concerning principles to be incorporated in the proposed telephone system, which I have done in the references. Final recommending authority to the Building Planning Committee would appear to rest with the Office of Security.

3. As to the system itself, I believe that it is essential that the principles recommended in the references be incorporated in order that a reasonable degree of protection from penetration attempts can be provided. If you or the Building Planning Committee are unable to incorporate these principles, then it is my further recommendation that the telephone system be called "an internal telephone exchange", be designed for privacy use, and limited to conversations of a RESTRICTED classification and below.

[ ]

25X1A9A

385

SECRET



Chief, Building Planning Staff, OL

Director of Security

New Headquarters Building  
Secure Internal Telephone System

1. A memorandum of 12 February 1957 submitted security requirements for a "Secure Internal Telephone System" which covered the type of system, the construction of frame rooms, and the running of cables or wires to the terminal boxes. It was stated further that there still remained to be determined the manner in which the wires within office rooms, and the instruments themselves, can be made secure.

2. After careful consideration of all the security factors involved, and of the technical information obtained, the Office of Security now offers no objection, if the other requirements of the previous memorandum are followed, to the running of wires in office rooms through a floor duct which contains no other wires used for any other purpose; to having connections of instruments made to such wires in the same manner as normal telephone installation; and to having unused hand-holes in such floor ducts covered in the manner usual for normal telephone service.

3. It is recognized that additional security would be afforded by the installation of an electrical alarm system which would give notice of any tampering with the instruments or wires. Such systems are in the development stage, and it is requested that provisions be made in the planning to permit the installation of such a system should it become practical at a later date.

Sheffield Edwards

CONCURRENCE:

Director of Communications

Date

386

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY

930 H Street, Northwest

Washington 1, D.C.

E. G. Bliss  
Assistant Vice President

Telephone  
Metropolitan 7-9900

July 2, 1957

STATINTL

[redacted] Chief  
Building Planning Staff  
Central Intelligence Agency  
Washington 25, D. C.

STATINTL

Dear Mr. [redacted]

The policy considerations in respect to the internal telephone system which we have offered to provide in your new building have been given careful consideration. I think you can appreciate that some of these security requirements were stated so broadly that it was somewhat difficult for us to interpret to what degree compliance might require a modification in practices which were essential in the furnishing of satisfactory service. In order to develop more precisely what such requirements might be we have, during the last month, conferred with Colonel Edwards and Mr. [redacted] and as a result, I believe, we have reached a satisfactory understanding.

STATINTL

It now appears that we can conform in a manner satisfactory to your Agency with all the considerations covered by the intended portion of paragraph three (3) of your letter of May 8th. In order, however, that there may be no misunderstanding I will set forth, in detail, the security requirements which we interpreted our concurrence in the general policy considerations.

1. The installation and maintenance by the Telephone Company of an internal telephone system entirely separate and in no way connected, or a part of, any other telephone or communication system.
2. The Agency shall have exclusive control of the location and use of the system.
3. The Agency shall establish such security provisions for the physical location of the telephone equipment and other facilities as they deem necessary and shall have control over access or entrance to these locations. In addition, the Agency may, without advise or notification to the Telephone Company make

387 ✓

such inspections of the locations as they determine necessary for security purposes.

4. The Agency may modify the system or any part of it at any time without participation by or the necessity for disclosures to the Company. It shall be understood and agreed that no devices or apparatus will be connected to the system, or any changes made by other than Telephone Company employees, which in any way may affect or interfere with the normal operations of the system. We have been assured that wherever practicable when changes have been made without our knowledge, restoration to normal conditions will be made as soon as possible after the need for the change of modification ceases to exist. In such cases we have also been given to understand that the usual practice will be to call on our people for this restoration. While it appears, from such information as has been furnished to us, that such cases will rarely occur we would, of course, expect that the Agency would by means of suitable orders compensate for any extraordinary maintenance expense.
5. All employees of the Company who work on or have access to the system shall be subject to Agency security clearance procedures.
6. Telephone Company employees will follow their normal instructions and practices, which provide for safeguarding the service against tampering or interference. In addition, company personnel will follow normal practices concerned with checking use of facilities and accuracy of records.
7. In regard to records, the following will be kept permanently in the equipment room of the internal telephone system of your Agency which we understand will be considered a restricted area.
  - a. Cable assignment record book.
  - b. Equipment assignment book.
  - c. Line cards maintained for each working station.

In regard to the items covered in a, b and c above, in which we found it necessary to consult with your security people in order to determine what your requirements were intended to cover, we understand that what we have stipulated satisfactorily meets the Agency's security requirements.

388

In regard to the orders for additions or changes which may be required in connection with this system, in addition to those involved in the initial installation, we understand that they may be issued in such form as to be non-sensitive. It has been our practice in the past and the same will apply to your new building for a Service Engineer of the Commercial Department to be assigned to handle all business contacts involved in the furnishing of service. Such an employee has always been cleared by your Agency to a degree satisfactory to you and the same will apply at your new location.

Very truly yours,

E. G. Bliss  
Assistant Vice President  
Security Control Officer

389

CONFIDENTIAL

16 August 1957

MEMORANDUM for the Record

SUBJECT: Private Internal Telephone System

25X1A9A

1. A meeting was held today in the office of the DD/S to discuss various security matters in connection with construction of the new CIA headquarters building at Langley, Virginia. Present were Col. White, Deputy Director (Support); Col. Edwards, Director of Security; [redacted] Chief, Building Planning Staff; [redacted] DD/S Liaison Officer on new building and Management Assistant/BPS; and the undersigned.

25X1A9A

2. One of the security matters discussed was the question of whether the proposed private internal telephone system (the so-called "secure phone" system) should be leased from the Chesapeake & Potomac Telephone Company or the equipment purchased outright by the Agency from the Mosler Co. or Stromberg-Carlson. After discussion of the relative costs and other factors, Col. White made the decision that CIA should plan on the leased system from C&P company. Col. Edwards acquiesced.

3. The matter of how the telephone wires should reach the instruments in the rooms was also raised--whether exposed wiring as favored by the Office of Communications or through floor ducts as desired by BPS and agreeable to Office of Security. The DD/S with the concurrence of the Director of Security ruled that floor ducts was the preferable method.

[redacted]  
Security Assistant  
Building Planning Staff

25X1A9A

390

CONFIDENTIAL